

Biology 112: Classification Quiz **Name:** _____

A. Multiple Choice:

TOTAL 15

1. Proceeding down the classification levels from kingdom to species, there is increasing
 - a. diversity among individuals.
 - b. similarity among individuals.
 - c. individuality.
 - d. activity.
2. What fundamental characteristic differentiates Eubacteria from Archaeobacteria?
 - a. They lack internal membrane-bound organelles.
 - b. They divide asexually.
 - c. They have peptidoglycan in their cell walls.
 - d. They have only one chromosome.
3. A group of organisms that are similar in structure, reproduce under natural conditions, and produce fertile offspring are referred to as a
 - a. group.
 - b. genus.
 - c. family.
 - d. species.
4. Two biology students were asked to classify several organisms. A few of the organisms were classified differently by each student. This result could be because
 - a. the observations were objective.
 - b. only certain organisms are alike.
 - c. classification depends on the criteria used.
 - d. structural characteristics vary for different organisms.
5. The cellular organelles absent in bacteria are
 - a. cell walls.
 - b. mitochondria.
 - c. plasma membranes.
 - d. flagella.
6. *Canis familiaris* and *Canis lupus* belong to the same
 - a. family but are different genera.
 - b. genus but are different species.
 - c. species but are different genera.
 - d. species but are different varieties.

7. Which pair of species would be most similar?
 - a. Both are in the same class but in different orders.
 - b. Both are in the same phylum but in different classes.
 - c. Both are in the same family but in different genera.
 - d. Both are in the same kingdom but in different phyla.

8. Taxonomy is defined as
 - a. the classification of organisms.
 - b. preserving dead animals.
 - c. the differentiation of organisms by genus and species.
 - d. categorizing organisms according to geographic location.

9. According to binomial nomenclature, the organism *Acetabularia mediterranea* is most closely related to
 - a. *Mediterranea crassa*.
 - b. *Mediterranea crenulata*.
 - c. *Acetabularia crenulata*.
 - d. *Crenulata acetabularia*.

10. The two terms used in binomial nomenclature are
 - a. class and order.
 - b. family and genus.
 - c. family and order.
 - d. genus and species.

11. The main criterion for the present system of classification is
 - a. nutritional patterns.
 - b. evolutionary relationships.
 - c. geographical distribution.
 - d. structural characteristics.

12. Cells without membrane-bound organelles are known as
 - a. autotrophs.
 - b. eukaryotes.
 - c. heterotrophs.
 - d. prokaryotes.

B. Add derived characters to complete this cladogram on the three domains of life.



